REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

subject to any penal PLEASE DO NO	ty for failing to comp	R FORM TO T	of information if it does not display HE ABOVE ADDRESS.	ay a currently valid	OMB control	number.	
	TE (DD-MM-YY		ORT TYPE			3. DATES COVERED (From - To)	
4. TITLE AND	CURTITUE				5a. COI	NTRACT NUMBER	
4. IIILE AND	SUBTILLE						
					5b. GR/	ANT NUMBER	
					5c. PRC	OGRAM ELEMENT NUMBER	
6. AUTHOR(S)					5d. PRC	DJECT NUMBER	
					5e. TASK NUMBER		
					5f. WORK UNIT NUMBER		
			155550(50)			LO DEDECORABLO ODCANIZATION	
		ON NAME(S) A	ND ADDRESS(ES)			8. PERFORMING ORGANIZATION REPORT NUMBER	
Department of Headquarters l		ces, CHECO I	Division				
Hickam AFB,		,					
9. SPONSORIA	IG/MONITORING	AGENCY NAM	ME(S) AND ADDRESS(ES))		10. SPONSOR/MONITOR'S ACRONYM(S)	
0. 0							
						11. SPONSOR/MONITOR'S REPORT	
						NUMBER(S)	
	ION/AVAILABIL		Т				
A Approved	for Public Rel	ease					
13. SUPPLEME	NTARY NOTES						
14. ABSTRACT							
Project CHECO was established in 1962 to document and analyze air operations in Southeast Asia. Over the years the meaning of							
the acronym changed several times to reflect the escalation of operations: Current Historical Evaluation of Counterinsurgency Operations, Contemporary Historical Evaluation of Current							
Operations. Pr	Operations. Project CHECO and other U. S. Air Force Historical study programs provided the Air Force with timely and lasting						
corporate insig	corporate insights into operational, conceptual and doctrinal lessons from the war in SEA.						
15. SUBJECT T		or Worin Sou	though Asia Vietnam V	War Aerial O	nerations	American	
CHECO reports, Vietnam War, War in Southeast Asia, Vietnam War- Aerial Operations, American							
			T47 LIMITATION OF	TAO MUMADED	140 1144	ME OF DECOMARINE DEDOM	
a. REPORT	CLASSIFICATIO b. ABSTRACT		17. LIMITATION OF ABSTRACT	OF	19a. NA	ME OF RESPONSIBLE PERSON	
				PAGES	19b. TEL	EPHONE NUMBER (Include area code)	



DECLASSIFIED BY AF/HOH IAW E.O.12958 (AMENDED) DATE: 20080718 APPROVED FOR PUBLIC RELEASE

PROJECT CSCONTHEAST ASIA CSCONTHEAST ASIA

SHORT ROUNDS AND RELATED INCIDENTS 1 JUN 69 TO 31 DEC 70

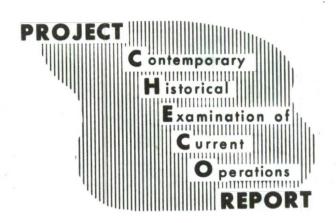
CONTINUNING REPORT

GROUP-1
Excluded from automatic downgrading and declassification.

DECLASSIFIED BY
RICHARD DAVIS, AF/CHOF
15 October 1985

20080910347

K717.0413-19 1971 c. 2



SHORT ROUNDS AND RELATED INCIDENTS 1 JUN 69 TO 31 DEC 70

15 FEBRUARY 1971

HQ PACAF
Directorate of Operations Analysis
CHECO/CORONA HARVEST DIVISON

Prepared by:
PROJECT CHECO, 7AF
Project CHECO 7th AF, DOAC





DEPARTMENT OF THE AIR FORCE

HEADQUARTERS PACIFIC AIR FORCES
APO SAN FRANCISCO 96553



CL 13 THE CHILL OF STATE

PROJECT CHECO REPORTS

The counterinsurgency and unconventional warfare environment of Southeast Asia has resulted in the employment of USAF airpower to meet a multitude of requirements. The varied applications of airpower have involved the full spectrum of USAF aerospace vehicles, support equipment, and manpower. As a result, there has been an accumulation of operational data and experiences that, as a priority, must be collected, documented, and analyzed as to current and future impact upon USAF policies, concepts, and doctrine.

Fortunately, the value of collecting and documenting our SEA experiences was recognized at an early date. In 1962, Hq USAF directed CINCPACAF to establish an activity that would be primarily responsive to Air Staff requirements and direction, and would provide timely and analytical studies of USAF combat operations in SEA.

Project CHECO, an acronym for Contemporary Historical Examination of Current Operations, was established to meet this Air Staff requirement.

Managed by Hq PACAF, with elements at Hq 7AF and 7AF/13AF, Project CHECO provides a scholarly, "on-going" historical examination, documentation, and reporting on USAF policies, concepts, and doctrine in PACOM. This CHECO report is part of the overall documentation and examination which is being accomplished. Along with the other CHECO publications, this is an authentic source for an assessment of the effectiveness of USAF airpower in PACOM.

ROLL (AMPLE), Major General, USAF



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS PACIFIC AIR FORCES APO SAN FRANCISCO 96553



REPLY TO

DOAD

15 February 1971

SUBJECT

TO

Project CHECO Report, "Short Rounds and Related Incidents, 1 Jun 69 to 31 Dec 70" (U)

SEE DISTRIBUTION PAGE

- 1. Attached is a SECRET document. It shall be transported, stored, safeguarded, and accounted for in accordance with applicable security directives. Each page is marked according to its contents. Retain or destroy in accordance with AFR 205-1. Do not return.
- 2. This letter does not contain classified information and may be declassified if attachment is removed from it.

FOR THE COMMANDER IN CHIEF

MAURICE L. GRIFFITH, Colonel, USAF Chief, CHECO/CORONA HARVEST Division

Directorate of Operations Analysis

DCS/Operations

1 Atch

Proj CHECO Rprt (S), 15 Feb 71

DISTRIBUTION LIST

1.	SECF	RETARY OF THE AIR FORCE	j.	AFPDC (1) AFDPXPS
	a. b.	SAFAA 1 SAFLL 1		(2) AFDPW 1
	c. d.	SAFOI 2 SAFUS 1	k.	AFRD (1) AFRDP 1 (2) AFRDQ
2.	HEAD	DQUARTERS USAF		(3) AFRDQPC
	a.	AFNB 1		(5) AFRDQL 1
	b.	AFCCS (1) AFCCSSA 1 (2) AFCVC 1 (3) AFCAV 1 (4) AFCHO 2 (5) AFCVD 1	1.	AFSDC (1) AFSLP
	c.	AFCSA	m.	AFTAC 1
		(1) AFCSAG 1 (2) AFCSAMI 1	n.	AFXO 1 (1) AFXOD
	d.	AFOA 2		(2) AFXODC 1 (3) AFXODD
	e.	AFIGO (1) OSIIAP 3 (2) IGS 1		(4) AFXODL
	f.	AFSG 1		(8) AFX00S0 1 (9) AFX00SS
	g.	AFNIATC 5		(10) AFX00SV
	h.	AFAAC 1 (1) AFACMI 1		(12) AFXOOTW
	i.	AFODC (1) AFPRC 1 (2) AFPRE 1 (3) AFPRM 1		(15) AF/XOX 6 (16) AFXOXXG 1

MAJ	OR COMMAND	b.	SAC	
a.	TAC		(1) HEADQUARTERS	
	(1) HEADQUARTERS (a) DO	1 2 1 1	(a) DOPL	. 1 . 1 . 1 . 1
	(2) AIR FORCES (a) 12AF 1. DOO	1	(2) AIR FORCES (a) 2AF(INCS) (b) 8AF(DOA) (c) 15AF(IN)	. 1
	(b) T9AF(IN) (c) USAFSOF(DO)] c.	MAC	
	(3) WINGS (a) 1SOW(DOI) (b) 23TFW(DOI) (c) 27TRW(DOI) (d) 33TFW(DOI) (e) 64TAW(DOI) (f) 67TRW(DOI) (g) 75TRW(DOI) (h) 316TAW(DOX) (i) 317TAW(DOI) (j) 363TRW(DOI) (k) 464TFW(DOI)	1 1 1 1 1 1 1 1	(1) HEADQUARTERS (a) DOI	. 1
	(1) 474TFW(DOI)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(1) HEADQUARTERS (a) DO	. 1
	(b) USAFTFWC(DRA) (c) USAFAGOS(EDA)	1		

	(2) AIR DIVISIONS	j.	USAFS0
	(a) 25AD(DOI) 1 (b) 29AD(DO) 1 (c) 20AD(DOI) 1		(1) HEADQUARTERS (a) CSH1
e.	ATC (1) DOSPI 1	k.	PACAF
f.	AFLC		(1) HEADQUARTERS (a) DP 1
	(1) HEADQUARTERS (a) XOX		(b) IN
g.	AFSC		(f) DC 1 (g) DM 1
	(1) HEADQUARTERS (a) XRP		(2) AIR FORCES (a) 5AF 1. CSH
h.	USAFSS		2. XP 1 (e) 7/13AF(CHECO) 1
	(1) HEADQUARTERS (a) WCSF		(3) AIR DIVISIONS (a) 313AD(DOI) 1 (b) 314AD(XOP) 2
	<pre>(2) SUBORDINATE UNITS (a) Eur Scty Rgn(OPD-P) . 1 (b) 6940 Scty Wg(OOD) 1</pre>		(b) 314AD(XOP) 2 (c) 327AD 1. IN 1 (d) 834AD(DO) 2
i.	AAC		
	(1) HEADQUARTERS		

	(4)	WINGS	4.	SEPARATE OPERATING AGENCIES
		(a) 8TFW(DOEA)		a. ACIC(DOP) b. AFRES(XP) c. AU 1. ACSC-SA 2. AUL(SE)-69-108 3. ASI(ASD-1) 4. ASI(HOA) d. ĀNALYTIC SERVICES, INC e. USAFA 1. DFH
	(5)	OTHER UNITS (a) Task Force ALPHA(IN) 1 (b) 504TASG(DO) 1 (c) Air Force Advisory Gp 1		
m.	USA	FE .		
	(1)	HEADQUARTERS (a) DOA		
	(2)	AIR FORCES (a) 3AF(D0)		
	(3)	WINGS (a) 36TFW(DCOID) 1 (b) 50TFW(DOA) 1 (c) 20TFW(DOI) 1 (d) 81TRW(DCOI) 1 (e) 401TFW(DCOI) 1 (f) 513TAW(DOI)		

(4) GROUPS (a) 497RTG(TRCOD). 5

5.	MILITARY DEPARTMENTS, UNIFIED AND SPECIFIED COMMANDS, AND JOINT STAFFS	5
	a. COMUSJAPAN b. CINCPAC (SAG) c. CINCPAC (J301) d. CINCPACFLT (Code 321). e. COMUSKOREA (ATTN: J-3) f. COMUSMACTHAI g. COMUSMACY (TSCO) h. COMUSTDC (J3). i. USCINCEUR (ECJB) j. USCINCSO (DCC) k. CINCLANT (N31) l. CHIEF, NAVAL OPERATIONS. m. COMMANDANT, MARINE CORPS (ABQ) n. CINCONAD (CHSV-M). o. DEPARTMENT OF THE ARMY (TAGO). p. JOINT CHIEFS OF STAFF (J3RR&A) q. JSTPS. r. SECRETARY OF DEFENSE (OASD/SA) s. CINCSTRIKE (STRJ-3). t. CINCAL (HIST). u. MAAG-CHINA/AF Section (MGAF-0) v. HQ ALLIED FORCES NORTHERN EUROPE (U.S. DOCUMENTS OFFICE) w. USMACV (MACJO31)	
6.	SCHOOLS	
	a. Senior USAF Representative, National War College	1777777777
7.	SPECIAL	
	a. The RAND Corporation	1

TABLE OF CONTENTS

	Page
CHAPTER I - INTRODUCTION	. 1
CHAPTER II - MAJOR INCIDENTS	. 4
CHAPTER III - SHORT ROUNDS DUE TO POSITION OF GROUND TROOPS	. 15
CHAPTER IV - OTHER CAUSES	. 31
CHAPTER V - RELATED AND MISCELLANEOUS INCIDENTS	. 42
FOOTNOTES	
CHAPTER I CHAPTER II CHAPTER III CHAPTER IV CHAPTER V	. 51 . 53 . 55
APPENDIX	. 58
GLOSSARY	. 61



INTRODUCTION

In mid-September 1970 the commander of U.S. forces in Southeast Asia, General Creighton W. Abrams, wired all units

I am becoming increasingly concerned over the significant increase in the number of incidents in which friendly Vietnamese civilians have been killed or injured by U.S. aircraft. Since 2 September 1970, seven incidents have been reported. . . Such incidents are counterproductive.

The quarter following his message, October through December 1970, was the first quarter since January 1965 during which there were no USAF short rounds in South Vietnam reported by MACV. This elimination of reportable incidents may have been attributable in large part to the reduction in sorties flown in the Republic of Vietnam.

The term "short round" is an artillery term in origin: a <u>round</u>
which fell <u>short</u> of the enemy positions and fell on friendly troops
instead. In Air Force usage, this term has been modified slightly: "A
short round incident is defined as the air delivery of ordnance which
results in injury or death to friendly military force or noncombatants"
and "which is reported as such by the ground forces involved." If it is
not reported by the ground commander, it is called an "Air-DeliveredOrdnance Incident." In MACV usage at the time of this writing, the term
"Friendly Casualties Resulting from Supporting Fires" was used to include

casualties caused by naval gunfire, helicopters, and Army weapons, as well as by aircraft.

MACV published a summary every quarter which included analyses and breakdowns of number incidents, types of weapons, and casualties. Those covering this reporting period are attached as an appendix to the present report. When taken in the aggregate for the past several years, they reveal that, in general, aerial short rounds increased as rainy weather increased and as the number of sorties flown increased. They also show that incidents caused by Army weapons far outnumber those caused by fixedwing aircraft, but that USAF short rounds cause a much higher number of casualties per incident—an unfortunate consequence of the greater size and effectiveness of air ordnance.

For instance, artillery accounted for over half the short rounds in 1967, but only 40 percent of the deaths from short rounds and 44 percent of the wounded.* Helicopters, mostly gunships: short round incidents, 6 percent; deaths, 14 percent; wounded, 7 percent. Fixed-wing aircraft: incidents, 9 percent; deaths, 29 percent; wounded, 24 percent. The corresponding figures for 1970 are: artillery incidents, 25 percent; deaths, 36 percent; wounded, 27 percent. Helicopters: incidents, 14 percent; deaths, 12 percent; wounded, 22 percent; Fixed-wing aircraft: incidents, 4 percent; deaths, 3 percent; wounded 8 percent. A MAC-CORDS survey

^{*} Complete figures were available for only 1967 and 1970. Some minor categories are not given here.

showed that villagers feared short rounds from artillery much more than air strikes: 31.4 percent against 3 percent.

In July 1969, Seventh Air Force did an analysis between short rounds and their relationship with weather. It concluded that during the rainy season, there are more short rounds because low ceilings and poor visibility force pilots to use less effective and more dangerous delivery techniques. Other factors found were increased holding time over target and more dry passes, with a correspondingly greater consumption of fuel. What follows are a hurried attack, a "release of ordnance under parameters infrequently use, . . . a requirement to depart the target and vector to jettison area before RTB [return to base], and a possible requirement to RTB with ordnance in low weather landing conditions and on wet runways." Seventh Air Force therefore conducted information campaigns in the combat wings in recent years before each rainy season in order to minimize short round incidents. In the incidents related in this report, bad weather was not the factor it once was, possibly because of these campaigns. The author instead found that a small number of human causes accounted for the majority of short rounds. Certain of the major incidents had international consequences.



MAJOR INCIDENTS

Occasionally, short rounds and related incidents affected the relations of the United States with other countries. Seventh Air Force gave these matters its closest and most prompt attention. The two major incidents described here point up the problems involved in operating in border areas and in campaigns which receive the attention of the world's press, with its conflicting interpretations.

DAK DAM POST

On 21 November 1969, General Creighton W. Abrams, the commander of MACV, sent an urgent message to the I Field Force commander on a highly sensitive matter which had come to involve the acting premier of Cambodia, the U.S. State Department, the International Control Commission, and General Abrams himself. U.S. tactical aircraft, U.S. Army artillery and helicopter gunships had, according to the acting premier, attacked a Cambodian military post across the border from South Vietnam on 16 and 17 November. The Cambodian government was expected to lodge a protest soon to Washington.* General Abrams directed I Field Force to conduct an expedited formal investigation in order to determine the true and complete facts in the matter.

In September 1969, U.S. military intelligence had detected an NVA buildup in Cambodia across the border from the Civilian Irregular Defense

^{*} This activity occurred before the U.S. - RVN operation in Cambodia.

Group (CIDG) Camp of Bu Prang in Quang Duc Province. It looked as if a new enemy base area was being established, and it may have been that the CIDG camps with their associated mobile-strike-force bases and activities constituted a threat to that base area, in the enemy's eyes, for the build-up was within rocket, mortar, and artillery range of Bu Prang.

Enemy shelling of friendly outposts in the area began in late October, increasing in volume and in the size of weapons employed. A gauge of the seriousness of the situation was the establishment in early November by Hq I Field Force--the Army command with responsibility for this region--of a forward mobile staff at nearby Ban Me Thuot to augment the MACV advisory team there. In Army records the barrage was referred to as an offensive.

Until the first of November, these attacks by fire on Bu Prang came from enemy positions within South Vietnam, as they had at times in the past, with the enemy using 60mm and 82mm mortars, 75mm recoilless rifles, and B-40 rocket launchers. By 1 November it became necessary to evacuate three fire support bases near Bu Prang, but then the enemy's shelling concentrated on Bu Prang itself.

Now the barrage was more intense and much heavier; longer-range weapons were being employed. Some of the Army officers at the camp suspected that their emplacement was in Cambodia. The average range of 85mm guns, 107mm rockets, 120mm mortars, and 105mm howitzers was about 9000 meters, and some of the shells were coming from the north. These facts together made it extremely likely that the Communists were firing from sanctuary, for Bu Prang is on the Cambodian border at a point where it runs east and west. If

fire was coming from the north, it had to be coming from Cambodia. The Allied rules of engagement at that time prohibited firing into Cambodia-except to silence fire coming from there.

The increasingly heavy 105mm fire caused the camp's commander to declare a tactical emergency early on 16 November. An Air Force FAC who was sent aloft to locate the guns said he saw muzzle flashes at coordinates almost corresponding to the location of the Cambodian Army camp of Dak Dam. These guns were beyond the range of the artillery at Bu Prang, and fighters were therefore requested from 7AF TACC.

It must be noted that before the request for air support was relayed, I Field Force took unusual precautions to verify that each official named in the request was in fact in that position and that the commander declaring the tactical emergency was in fact the commander. Furthermore, a few weeks earlier, when it had begun to appear that Cambodia was the likely source of the artillery barrage, I Field Force had requested confirmation of the rules of engagement relative to Cambodia; and MACV had replied that the political climate had not altered those rules, "...however, it is emphasized that responsive fire will be delivered in a timely manner on a positively identified source of enemy fire only, and reconnaissance by fire in Cambodia is strictly prohibited."

At 0900, two F-4s put napalm and 750-1b bombs on the gun emplacement which the FAC had identified by muzzle flashes, and then they strafed it. In so doing, they received extremely heavy ground fire, but the FAC

estimated that 10 of the enemy were killed. Other strikes were made on the artillery piece that morning until a second FAC's aircraft was badly hit and he had to make a nearly unsuccessful emergency landing at Bu Prang.

The gun was silenced, but by 1135 another tactical emergency had to be declared because of resumed shelling. This time four other gun positions were designated as targets and were struck. But the antiaircraft fire was so intense that high-altitude delivery tactics had to be employed. At 1325 the FAC who took over the one who was hit reported a "huge" secondary explosion. All guns were apparently silenced.

One of the guns hit was the 37mm piece which earlier had put the FAC $\frac{18}{}$ out of commission. The second tactical emergency was terminated at 1425.

By 0900 the next morning, however, Bu Prang was again taking incoming fire, and the commander declared a third tactical emergency. After two flights of aircraft were diverted from their preplanned targets and had dropped their loads on the Dak Dam guns instead (on an artillery piece thought to have been destroyed the day before), the shelling of Bu Prang stopped altogether, and this tactical emergency was also ended. But the diplomatic emergency was just beginning, as the Cambodian government proposed an on-the-site damage inspection of the Dak Dam post by the $\frac{21}{1}$ International Control Commission and the press.

A few miscellaneous but pertinent observations are in order here. $\frac{22}{}$

The FACs reported having seen "many buildings and antennas in the area" $\frac{23}{}$ of the strikes. Battle-damage assessment made by FACs after the gun emplacements were struck included buildings, bunkers, and trucks. It was clear that throughout most of the events, at least, FACs directed strikes only against guns that had actually been observed firing, although records reveal the possibility that after the raids had started, this was not strictly adhered to; these records show that some of the guns hit were firing, but for other guns the same notation could not $\frac{24}{}$ be found. In this connection, too, it should be noted that in October, when the small fire support bases were being shelled, some artillery pieces were seen in Cambodia, but they were not struck then because the rules of engagement required that they be seen actually firing.

An "artillery analysis" of the situation was made by an Army expert afterwards. It appeared to him that the NVA had set up 85mm guns, with greater range than the 105mm, just outside the range circle of Bu Prang's 105mm artillery so that the Communists could attack with freedom from $\frac{26}{}$ counterbattery fire.

SNOUL

One week after the Cambodian campaign began, the USAF received some of the worst press of the Indochina War. In a dispatch that appeared in newspapers around the world, the Associated Press' Peter Arnett, a Pulitzer Prize winner highly respected for his reporting on Vietnam, $\frac{27}{}$ wrote:

(Snoul, Cambodia) -- American tanks captured the Cambodian plantation town of Snoul this morning after U.S. air strikes destroyed 90 per cent of it. Observers said the American soldiers celebrated the victory by tearing down the Cambodian flag flying over the district capital, and looting the few shops still undamaged. . . .

Twelve hours earlier, part of a 2000-man North Vietnamese force inside the rubber plantation had forced the same tank unit to retreat after it had fought its way into the center of the town.

Air strikes methodically blasted the two-story concrete buildings in the center of the town to pieces. An area of two big city blocks was completely leveled. Only one row of shops was left standing Wednesday morning. . . .

Thus did Snoul become the first Cambodian town of significant size to be destroyed by American arms. . . .

The roof of a Roman Catholic church near the edge of Snoul took a direct hit but was one of the few structures left standing. . . .

Spec 4 Ronald Brown of Detroit, Mich., shook his head when he saw the body of a child that apparently had been killed by a napalm strike. . . .

Lt. Col. Grail Brookshire of Stone Mountain, Ga., the [tank] squadron commander, was asked the tactical reason for the destruction of Snoul.

"We had no choice," said the cigar-smoking colonel.
"We had to take it."

Needless to say, the USAF immediately opened an inquiry into the events at Snoul. It was conducted by the Chief of the 7AF TACC Current-Operations Division, who obtained statements from all the FACs and strike pilots who had operated near Snoul on the day in question, 5 May.

He concluded that, despite what Mr. Arnett had written, the "Rules of Engagement were strictly followed. All procedures were normal. The FACs received clearance to attack each discrete target from the ground commander who had troops in contact."

It is interesting that one of the <u>Stars and Stripes</u> most respected reporters was with Colonel Brookshire's tank column during its first attempt to penetrate Snoul the evening before. But in his dispatch the only ordnance mentioned as being used on the buildings of the town came from weapons mounted on the U.S. Army tanks. In the <u>Stars and Stripes</u>, Colonel Brookshire is quoted nevertheless as saying (to his men, but in front of the reporter), "Our mission is to find out what is in the town and take it without destroying it. Make sure you don't hit any civilians. The American people are riding with us."

The 7AF inquiry included statements from two FACs and eight strike pilots and battle-damage assessments for all their strikes. A total of three houses were reported as destroyed in one strike, two damaged in another. Descriptions of the other strikes all carry the notation, "No impacts were observed on houses or structures."

Seventh Air Force's report says that the 2nd Squadron of the 11th Armored Cavalry Regiment moved into Snoul on 5 May. As they proceeded up Highway 7, then northward on Highway 13, they came under intense fire from an ambush position located in a rubber plantation to the west of Highway 13 adjacent to the village. In the course of the ensuing fight,

"heavy fire was received from numerous buildings and structures in the village," forcing the unit to retire and regroup before consolidating its position in the village.

Seventh Air Force's report continued: 32,

Photography reveals additional buildings destroyed and damaged besides those reported in this inquiry. The inquiry officer cannot determine the cause of this additional destruction. It could possibly be from the ground forces, helicopter gunships, or collateral damage from the TACAIR strikes, or a combination. Photo interpretation and ground examination may be able to determine the cause but no conclusion can be reached here.

The statements made by the FACs and pilots during the inquiry contain passages pertinent to the question of how the town was destroyed, but they do not answer it. From the statement of the FAC who worked the afternoon flights on 5 May:

No strafing was done. Hawk 05 was briefed not to fly over buildings 500 meters northeast. . . . Hawk 05 delivered their ordnance in accordance with these instructions. . . . One or two Cobra gunship helicopters rolled in and expended in the area of the ground-to-air fire. The Cobras set two buildings on fire. . . .

After telling the ground commander that the fighters would be expending in the proximity of houses at the location indicated, the ground commander still directed the area to be hit. . . . The fighters did not strafe or hit any buildings. . . . At completion of RAP 37's strike, Cobra gunships (two or four) started to expend on the same target area setting fire to one or two houses. . . /DICE 65/ also made two strafe passes. Some buildings may have been hit from the strafe. The fighters were cleared to run in 45 degrees either side of a line northwest to southeast for strafe. . . . On

their next pass they rippled two napalm bombs each southeast of where the MK-82s hit. The ground commander said to hit the buildings. The strafe was moved to the southeast as the friendlies withdrew. No strafe rounds were observed to go into the buildings. . . . The FAC's mark was on the road, 20 meters south of the buildings to be hit. HAWK 07 last cleared to hit the building 20 meters east of the mark with the first bomb and ripple the remaining three east from there. HAWK 07 had an armament malfunction and dropped all four bombs on the FAC's smoke. HAWK 08 was cleared with the same instructions as HAWK 07. HAWK 08 hit the target destroying three buildings.

And from the FAC who took over from the afternoon FAC and who worked until nightfall:

BATTLE 6, the Ground Commander, told me that his troops were advancing to the north and were continuing to take heavy small arms, .51 caliber and rocketpropelled grenade fire from buildings in the village to their immediate north (XU 553 351) and also from a corner of the rubber grove at XU 550 349, or as close to his elements as ordnance minimum safe distance would allow. . . . BATTLE 46 repeated that they were continuing to receive intense fire from the buildings identified above, and BATTLE 6 requested the ordnance of DOG 87 flight be expended as close to the friendlies as minimum safe distance would permit. Friendlies were identified by violet and yellow smoke approximately 500 meters to the south of the buildings. . . . DOG 88 was directed to drop his bombs east of the highway against two structures from which the ground forces reported they were taking fire. DOG 88's first two bombs heavily damaged one structure, and his second two bombs impacted between structures, causing light to moderate damage. . . . Between 1827H and 1920H I had no TACAIR scheduled and so I orbited the Snoul area, monitoring the ground situation of the 2/11. At approximately 1850H, two unidentified Cobra helicopter gunships, with no radio contact between them and the ground elements, expended an unknown number of 40mm rounds into the positions of BATTLE 16 and 46. No friendly casualties resulted.

These statements were from depositions made by fighter pilots who operated at Snoul on 5 May: $\frac{35}{}$

Particular attention was given to the town area throughout all phases of weapons delivery due to its close proximity. All structures were intact and no fires or damaged buildings were observed. . . .

The friendlies were located in a circular tree area at the bend in Highway 13, just south of the intersection with Route 7, where Highway 13 breaks north and goes through the town. After BLADE 03 had expended and as HAWK 07 flight was descending to the working altitude, NILE 12 said there was heavy .51 cal fire coming from the buildings in the town approximately 700 meters north of the friendly position. NILE 12 then put in a mark which was between the rubber plantation and the town on Highway 13 just to the west of the buildings and he said he wanted HAWK 07 flight's bombs on the buildings east of his mark. I asked him if he wanted HAWK 07 flight to hit the town and he said, "Affirmative. That's where the fire is coming from." As I rolled in on my pass, I saw what looked like muzzle flashes from the buildings which were our target. I also saw the friendlies firing into the target area from their positions. I could see the structures which were to be the target. . . . HAWK 08 rippled his four bombs starting at the FAC's smoke and moving eastward about 100 meters. This bomb train hit the structures from which the enemy was firing. . . .

Our target, located at approximately XU 557 349, was a group of trees approximately 50 meters by 200 meters which was bordering on the south of a small road which ran east and west along the southern edge of a village. . . . On the second pass, NILE 06 marked approximately 100 meters west of where the first bombs hit. This was in the western group of trees and just beyond the village houses. . . .

I was told that we would be working the edge of the rubber plantation next to the North-South Highway #13 and across the highway on north edge of the town against two military structures. . . NILE 06 then asked DOG 88 if he had DOG 87's bomb impacts and if so he was to hit a long storage-type structure directly across and on the east side of Highway 13. DOG 88 identified the structure next to the highway and was cleared by the FAC to drop two MK-82s.

DOG 88's bombs impacted on the left portion of the structure causing heavy damage. NILE 06 then instructed me to drop my next two bombs 20 meters short of my first two in the rubber plantation. I dropped two MK-82s and NILE 06 informed me they were on target. NILE 06 then instructed DOG 88 to hit another small square structure next to the highway and just short of the structure struck on his first pass. Number two identified the structure and was cleared in hot. The two MK-82 bombs were long by about 15 meters and impacted between the two structures. . . .

On our run-in heading, no structures were visible, but on pull-off from our target, structures were visible both left and right from our flare light.

None of these air strikes hit the village of Snoul.

The above quotes include all references to structures or houses in the depositions made for the 7AF inquiry, and the figures in them agree with those of the inquiring officer--three structures destroyed, two damaged.

On the basis of the inquiry and of AF records remaining at the end of 1970, it is impossible to determine the cause of the "90 per cent" destruction of Snoul.

CHAPTER III

SHORT ROUNDS DUE TO POSITION OF GROUND TROOPS

Aerial short round incidents were caused by the malfunctioning of equipment and by human error, but by far the single most frequent cause was simply the pilot's not knowing the location of all the ground troops. In some cases, the ground commander had not known where all of his elements were deployed. In others, he did know--but omitted one or two of the elements in relaying their positions on to the FAC. Yet in other cases, the FAC himself was remiss and did not pass all of them along to the pilots.

On the other hand, it was rare that the pilot's not knowing where all friendly positions were was the sole reason for a short round.

Usually, there was a cluster of causes, in this as in all categories of short round incidents.

As an example, on 5 April 1970 napalm dropped by two USAF F-4s killed four South Vietnamese soldiers and wounded 21 at Dak Seang, a Special Forces outpost in the northern mountains. One of the causes of the accident was the FAC's not telling the F-4 crews where all the friendly ground troops were located. Although the troop element in question had popped red-smoke grenades, the F-4 crewmen apparently did not make the usual association with the presence of friendlies.

At 1730 on that day elements of the North Vietnamese Army (NVA) had attacked a battalion of the 2nd Mobile Strike Force two kilometers south

of Dak Seang. The Australian advisor (and \underline{de} facto commander) established his defensive perimeter in a densely wooded area and called for tactical air support. The FAC was in the process of briefing the two F-4 crews who had just been scrambled when the commander broke in abruptly to say that he was surrounded by three columns of the enemy and receiving fire from 360 degrees—on one side from only 25 meters away. The F-4s therefore went in under rather precipitous conditions. Later testimony conflicted on the issue of whether the FAC had pointed out all of the friendly positions to the F-4 pilots first, but testimony did agree that the ground troops had indicated their positions around the defensive perimeter by red smoke.

The first F-4 went through its pass and hit the FAC's phosphorus mark on the ground with two canisters of napalm. But as the wingman proceeded to go in, with instructions to drop 25 meters to the right of the other napalm, the FAC suddenly changed the correction to 25 meters to the left. At this time the strike aircraft was halfway down final. Then, at the same moment that the F-4 crew was releasing its napalm, the FAC shouted, "Go through dry!" The lieutenant-colonel pilot of the F-4 answered, "Too late, too late!" This man was later to say also that the FAC "sounded confused."

It became apparent afterwards that the FAC, in switching back and forth from the FM radio channel he used for talking with the ground commander to UHF for talking with the strike aircraft, had cut off part of the

Australian major's last communication. The major had said, "Do not bring the napalm closer." The words "Do not" were cut off, and the FAC heard only ". . . bring the napalm closer." It was a cruel irony with tragic results.

And this, then, was the primary cause of the short round; however, the incident could have been avoided if the FAC, before the strike, had informed the strike aircraft crews of the presence of friendly forces in the vicinity of the strike. The two causes officially cited by the investigating officer afterwards were: (1) the broken radio communication and (2) the failure of the F-4 flight to "clarify the significance of the colored smoke they observed," which would have undoubtedly led them to go through dry when the FAC started changing instructions. The investigating officer recommended that all

FACs be rebriefed that notifying fighter aircrews of the presence of friendly forces in the target area is of prime importance. By having this information, the fighter aircrew can be of vital assistance to the FAC in moments of stress, as was the case in this incident, in the prevention of short rounds.

The following case also illustrates how short rounds can occur when the presence of friendly troops is not known to the strike pilots. In this instance, both the FAC and the fighter pilots were blameless and no departure from standard procedures was discovered. On 24 Jan 1970 the two F-100s in question strafed a suspected enemy location 12 miles northwest of Quang Ngai, in the operating area of the 1st Battalion of the

52nd U.S. Infantry Regiment. To the mystification of the USAF personnel involved, three ARVN soldiers were somehow killed and 45 injured as a result of that strafing. The investigation revealed why.

The U.S. Army's 198th Infantry Battalion had requested a preplanned air strike on a suspected enemy location three days earlier, on 21 Jan 70. It was processed normally, but aircraft could not be made available until 24 Jan, when two F-100s, coming back from a bombing mission with unexpended 20mm cannon rounds, checked in with the local control for possible use of this munition. They were sent to strafe the 198th's three-day-old target. After they had made one run, the FAC saw green $\frac{42}{4}$ smoke rising from the target area and called off further strafing.

Unfortunately, between the time that the strike request was first made on the 21st and the time of the strike on the 24th, the area had been turned over to the ARVN for a combat assault. The strike request had nevertheless been automatically renewed each day. The ARVN officer in charge of the unit which bore the short round losses did not know of the planned strike. There was, in other words, a lack of liaison among the U.S. Army brigade, the ARVN units, and the U.S. Air Force strike-control agencies. The 198th Brigade tactical operations center did not maintain situation maps—which would have shown the proximity of the planned air strike grid and the maneuver planned by the ARVN unit, the 2nd Battalion of the 6th Regiment. The U.S. Army investigating officer afterwards recommended that when a commander turns over an area to another commander, preplanned air strikes in that area should as a matter

operations center had not been made aware of this intelligence operation, for the nearest FAC was called and asked to take a closer look at the reported six boats. Later, this FAC was to say that when he was called, he was "practicing (WP) rocket delivery."

He arrived at nearby Song Go Gia and at 0925 notified the USAF tactical air control party attached to the Navy center that he had found the sampans, at the same time asking whether he should attempt to make them turn around and go back south. The Navy cleared the FAC to use smoke grenades in order to get them out of the restricted area of the swamp (north of YS--63).

Before using smoke grenades, the FAC said he tried flying around them at low altitudes, and four of the sampans did turn, the other two continuing north. After trying a few more low orbits on the remaining two, unsuccessfully, the FAC said he

dropped a smoke grenade at this time north of the sampan's position and it impacted in the river approximately 200 yards from his location. At this time it seemed he slowed down so I went to check on the progress of the other craft and noticed one near the north bank had not moved. I dropped another smoke grenade and he proceeded in the proper direction. The large sampan had continued to move up the river and I dropped another yellow smoke grenade while orbiting over the boat; this grenade landed in the water about 200-300 yards north of his position.

(The intelligence squad later said that a yellow smoke grenade had also been detonated by the men in the boat to show the FAC that they were friendlies, and an examination of their sampan confirmed this.)

of course be pointed out to the new commander and thenceforth made his responsibility. $\frac{44}{}$

If such liaison matters could be considered the responsibility of any one single man in this case, it would be the ARVN's liaison officer at the 198th Brigade headquarters. The investigation report states flatly that this man should have rescinded the blanket strike clearance issued for the target area, for at least the period of the ARVN battalion's activities there. Ironically, the FAC, just before the strike began, contacted the 198th's operations center, and the blanket clearance was reconfirmed.

The investigating officer nevertheless questioned why the request for confirmation was not passed on to the ARVN by the U.S. personnel of the center, since the target area was to be temporarily under ARVN command. Another question raised by the investigating officer—and also left unanswered—carried farther—reaching implications: why was the request to strike what may be presumed to be a perishable target, a suspected enemy location, renewed automatically until the strike was made, without a reconfirmation of the original intelligence?

Southeast of Saigon all the way to the sea there is an enormous swamp area covered with mangroves and crisscrossed with streams and canals. Intelligence-gathering squads patrol these canals—as on the morning of 26 Sep 70 when a South Vietnamese intelligence squad in six sampans was making its way north on the Song Go Gia River. The U.S. Navy tactical

The FAC then advised the USAF party at the Navy center that despite the smoke grenades the lone sampan persisted in its movement north. The center said to make it stop. The FAC asked whether he should use a white phosphorus marking rocket. The center authorized it. When this went off (according to the FAC, 75 yards upriver from the boat) everyone aboard dove over the sides. All except one could swim. Thus it was that the District Police Chief drowned, and a "short round" incident was created. Ironically, a short time afterwards the Navy center asked the same FAC to check out a report from one of its units that a USAF aircraft had fired on an intelligence squad on the Song Go Gia.

The source of this unfortunate incident was evident: insufficient communication among all the agencies responsible for granting clearances to fire. The USAF investigation could find no instance of the FAC's violating proper procedures, nor did any evidence emerge that the intelligence squad's planned mission had been passed along channels to a U.S. agency which could have averted the incident. The U.S. District Senior $\frac{50}{4}$

I instituted a CO's Action Brief Folder to eliminate my not getting the word. The duty officer is now aware of the seriousness of timely reporting of any operations. In the future if secure radio is inoperative, he will inform intel squad ops in crypto. I do, however, feel the TOC should have contacted me before issuing clearance to fire. District Senior Advisors through their counterparts offer the final safety check.

Although the USAF investigation does not mention it, it is clear from the Senior Advisor's statement that notification of the intelligence operation had not been made in time because the Navy's secure radio was not operating. In any case, underlying the immediate cause is the fundamental cause of the majority of short rounds: the people in the air not knowing where all the people on the ground are.

The variations on this theme were many. On 27 July 69 a FAC saw two sampans on a river in Military Region III. He requested, and got, permission from U.S. Navy authorities to fire on the boats. The result was one South Vietnamese killed, one wounded, and one American wounded. They had been on a reconnaissance-intelligence mission. The ensuing USAF investigation revealed that

the incident was caused by the Duc Hue District Advisory Team. The District Advisor granted clearance for the area, part of which fell within the Area of Operations of the Combined Reconnaissance Intelligence Platoon of the 2nd Battalion, 27th Infantry, without first obtaining the approval or checking with the forces operating in the area. The Advisor also failed to notify the FAC that friendly troops were in the area and the CRIP leader failed to insure that his location and activity was being reported to the Duc Hue Advisory Team.

The Vietnamese District Chief curtly said after the incident

I am the District Chief of Duc Hue District. The Duc Hue Advisory Team must have my permission to grant clearances within this district. I, as District Chief, know in which areas friendly people work.

I was not asked permission to grant the clearance on 27 July 1969 which resulted in an airplane firing on the CRIP 2/27. Before any clearance is granted, I believe that the unit on the ground should be consulted. They should be free to go anywhere within their AO. It is also possible that ground forces can get lost.

Very early in the morning of 28 Aug 69, a Vietnamese hamlet-defense militiaman was wounded by a USAF AC-47 gunship defending the man's hamlet in Military Region I. Before firing his miniguns, the AC-47 pilot had doublechecked with the U.S. ground advisor by radio on exactly where he was to fire, using a short burst with tracers for the confirmation. This was revealed later by the recording tape from the AC-47, which also contained a statement from the ground advisor that the nearest friendlies were 100 meters away and that he, the advisor, would take all responsibility for short rounds. It was therefore clear that no one aboard the gunship deviated from proper procedures. Once again, however, it was a case of the aircraft crew not knowing where all the friendly positions were. This time, it was the advisor who did not find out, or was not $\frac{54}{1000}$

For similar reasons, one ARVN soldier was killed and 11 others burned on 12 Aug 70. The 4th Battalion, 1st Regiment, of the 1st ARVN Division was moving southward down a north-south ridgeline during the latter part of the afternoon in order to close with some NVA elements. When sufficient contact had been made to locate the enemy troops, a U.S. Army team of one light observation helicopter and one helicopter gunship was called in. A USAF FAC in the area worked with them, and the number of troops they found

55/

justified a napalm strike by tactical air.

The ground advisor, an Australian, recommended a west-to-east pass for the two F-4s that were scrambled because, according to him, most of the ARVN troops moving down the ridge were 400 meters to the north, with another, smaller element 100 meters behind them. But it was a fast-moving situation in difficult terrain, and the 1st ARVN Division ALO was $\frac{56}{1}$ later to say

My recent experience with this /battalion/ has been that they had much difficulty in determining precise directions, which is understandable.

After a successful two-can napalm drop by the lead aircraft close to the western side of the ridge top, the second crew was asked by the FAC to drop even closer to the top. They dropped four canisters instead 57/ of two, "in an attempt to insure target coverage," the pilot explained.

The third canister did the damage, for it and the fourth went over the ridge, several hundred yards too long. The smaller ARVN element, which the ground advisor believed to be 500 meters to the north, had made its way farther south than that. Later checking proved that the ground advisor himself was not at the coordinates he thought he was. The fighter aircraft were recycled for strafing and expenditure of iron bombs, as there was no hint of mishap until the FAC saw yellow and purple smoke curling up from the spot where the third canister had hit on the east side of the ridge. Nor, at the time of the napalm drop, did the Australian advisor make any remark, cancel further ordnance drops, or otherwise indicate that he suspected anything untoward.

The investigating officer was able, therefore, to conclude that none of the parties concerned was aware of the presence of the ARVN element on the other side of the ridge. While noting that the maps for this area, though approved for use by 7AF, gave grid coordinates accurate only to the closest 100 meters and while the ground advisor was in a fast-moving situation in difficult terrain, the investigator also concluded that the primary cause of this incident was the advisor's not knowing the actual location of one of his moving elements, no matter what the reason. It allowed "the FAC to set up a potentially hazardous situation in the control of high-speed jet aircraft," unknowingly. As for the F-4 crew, the USAF investigating officer noted that they "made an error in judgment and a breach of flight discipline by making an unauthorized release of a second pair of BLU-27 napalm bombs during his second run (1st firing pass)." Interestingly, he added that the 1st ARVN Division did not report the incident as a short round. "They apparently felt that this incident was just an inherent part of war and could not be avoided."

Mountain ridges and hills can be dangerously deceptive during an air strike--especially when the FAC and the strike pilots do not know the location of all friendly troops. On 29 Mar 70, two F-100s were strafing enemy troop locations on a hill in Binh Dinh Province when, during their pull-up, some of their 20mm rounds apparently went beyond the hill and hit an American soldier two-and-a half kilometers away. The friendly positions (which had been indicated to the FAC by means of

flashing mirrors) were not understood to include the place where the soldier was hit. Because the shell fragments were never removed from the wounded man, it was never ascertained whether in fact he was hit by one of the aircraft or by enemy troops. But, according to the USAF investigating officer, the

lack of knowledge by the strike pilots of friendlies 2.5 kilometers to the west-southwest created a situation which could have contributed to strafing inaccuracies.

A curious incident occurred southwest of Binh Thuy, in the Delta, on the night of 13-14 September 1970, one that was never completely explained. The first indication of anything untoward was a call from an ARVN outpost in the Delta early in the morning of the 14th, requesting medical evacuation for "some civilians who supposedly had been wounded in an air strike" in that vicinity. Later, at 0800, another ARVN outpost requested the same thing for the same reason: civilians wounded in an air strike. The U.S. Advisory Staff for Military Region 4 recorded that a U.S. Army medevac helicopter airlifted the wounded to a nearby hospital where they received treatment and underwent interrogation by 21st ARVN Division personnel.

There had been three USAF air strikes near the ARVN outposts soon after midnight early on the 14th. Through visual reconnaissance, a night FAC had seen lights coming from "a large group of houses along both sides of a canal." The area was "a known VC base region, and no

question was ever raised" as to the identity of those in the houses with the lights on. Recently, there had been an "intelligence $\frac{65}{}$ sighting of 150 VC" in the area. The USAF A-37s, in three flights of two aircraft each, hit two locations eight miles apart along the canal, with napalm and high-drag iron bombs. When the strikes had first been proposed to the Province Chief and the 21st ARVN Division, information came with the approval that friendly troops were no closer than two or three kilometers and that no civilians were "close enough to be considered a factor." The battle-damage assessment reports included the destruction of over 20 structures and damage to a like number. It looked as if a civilian village had been hit in error. The first of the FACs involved advised the second to "reconfirm nearest friendlies" before putting in any more strikes, showing that he too probably suspected a short round.

Yet, one of the A-37 pilots saw their FAC take light ground fire from $\frac{68}{}$ the area. Two secondary explosions occurred. A ground sweep of the area afterwards found "four VC KIA." And, most telling of all, Tu Bien, a 53-year-old member of the VC's People's Liberation Council was found dead, with an AK-47 rifle on his person.

The USAF investigation was unable to establish whether a short round, as they are normally thought of, had occurred. It was not established who the wounded civilians were, Viet Cong or innocent villagers. All the investigation was able to confirm was that the strikes were properly cleared, all ordnance on target, the USAF FACs and strike pilots did not violate any procedures or directives, and the FACs were not made

aware of the presence of friendlies in the target area. All the investigation report could recommend was "that Vietnamese Army officials and Province Chiefs be aware of the location of all friendlies and only clear targets when they are positive of the disposition of noncombatants and $\frac{70}{}$ friendly forces."

On 24 June 70 an A-1 defending Bung Lung airfield in Cambodia dropped a cluster-bomb unit long, among some huts, killing one Cambodian and wounding four. It was at a time when the field was under mortar attack from Communist troops. Since the fragments had not been extracted from the victims' bodies, the USAF investigation was unable to determine whether they had been hit by mortar or by the long cluster-bomb unit. The final USAF report did, however, recommend that FACs "insist upon complete briefings from ground elements on friendly positions." The reason was that the hungup bomb unit could not have fallen among friendlies except on a south-to-north bomb-run head-in, and this head-in was decided upon by the FAC because it was parallel to the friendly positions that he knew about. Once again, the misplacement of ordnance, if any, was directly due to the people in the air not knowing the location of the people on $\frac{71}{1}$ the ground.

A short round incident that occurred 20 miles north of Tay Ninh on 28 Nov 69 was so shot through with confusion, mistakes, and misunder-standing that it is difficult to reconstruct exactly what happened, as indeed the USAF investigator found out afterwards. All that is sure is that two ARVN airborne troops were killed in it, 33 wounded, and one

U.S. advisor also wounded. The only blame that could be clearly identified was attached to the U.S. FAC, controlling VNAF A-ls at the time. Even this was based on the assumption that NVA personnel did not break in and give the Vietnamese aircraft false directions—an assumption advanced by the FAC but denied by the VNAF pilots. The FAC was taken off controlling duties and sent back for more training as a result of the incident, but the 7AF Staff Judge Advocate recommended against actual disciplinary measures because of the many elements of confusion and $\frac{72}{2}$

The U.S. advisors and the FAC did not agree afterwards on the distance between the enemy and friendly positions. Three colors of smoke were used by the advisors and FAC to mark these positions—with no agreement, however, on which color marked which position. When the advisors, who had courageously been marking the enemy bunkers with yellow smoke themselves, ran out of this color, they used purple, which had already been used to mark friendly positions. The American FAC and the Vietnamese pilots in any case had different ideas on which color indicated which side. Possibly because it was the sole fact upon which everyone agreed, the FAC's use of only two white-phosphorus rockets during what was a long $\frac{73}{4}$

Because it is difficult to conceive of a pilot knowingly releasing ordnance when he knows it will fall on friendlies, it is almost redundant to say that a major cause of short rounds is the pilot's not knowing

where the friendlies on the ground are located. It would be more precise to say that the major cause is incomplete communication of that location to the pilot.

CHAPTER IV

OTHER CAUSES

Six U.S. troops of an Americal unit were hit by bullets from an AC-119K's miniguns during an attack on the unit's camp in Military Region I. The camp was 9.5 kilometers from the intended target, which was on a parallel ridge of terrain similar to the ridge on which the camp was located.

This short round occurred on 7 May 70, at night, and the crew of the gunship was "seeing" the terrain through sensors. They had tentatively identified the target area and the pilot asked permission to drop a target marker, but the observation-scope operator at that moment said he had a good enough picture of the area. The crew did not ask the ground troops to use their strobe lights to identify themselves, either.

When, immediately afterwards, a large explosion occurred which the gunship crew took to be a secondary explosion caused by a U.S. artillery shell hitting on target, the crew was convinced it had the true target on its sensors and no further confirmation was requested from the ground. They did say to their ground contact that they had seen the explosion and would use it as the target, but a replay of the aircraft's magnetic tapes later showed ground's reply to be one unintelligible word. At this point when the crew asked whether they were cleared to expend, ground gave clearance "within a 100-meter circle on the ridge line." It

was then that the gunship fired--700 rounds of 7.62mm and 250 rounds of 20mm cannon. Those rounds hit within the perimeter of the Army camp's

landing zone and wounded the troops.

The landing zone had not been taking incoming fire at the time, but the troops within had been throwing hand grenades and shooting flares which could have been taken for artillery bursts by IR sensors as well as visually when viewed from the aircraft. The explosion seen by the AC-119's crew was in fact "Fou Gas," a liquid compound similar to that used in a flame-thrower and commonly used in U.S. perimeter defenses. It had been detonated by an outgoing grenade.

"Saucy Tonsils," the gunship's contact on the ground, shouted into his radio immediately after the rounds hit, "Check fire. Hold it!," and a star flare went up from the area.

the straight hally make place the

The investigation later found the AC-119's crew to be deficient in following prescribed procedures. For instance, the gunship did not ask the ground commander to mark the position of the friendly forces. Radio communications were handled through a third party, Saucy Tonsils in the tactical operations center, rather than directly with the commander himself. The crew did not comply with AF Regulation 55-49 which requires that the crew ask the ground forces to mark their positions. The pilot was led into a false sense of confidence by what was seen on the sensor screens. And the navigator did not use every means available to him to accurately fix the position of the aircraft.

In a similar incident, two ARVN soldiers were wounded by bombs from two USAF F-4s on 28 Sep 69 in Military Region I, because of difficulties experienced by both the ground FAC and the aircrews in seeing terrain and gauging distances at night. The FAC saw a flare burning four kilometers away and thought it to be over the target, which was at a distance of only 1.7 kilometers. The landmarks given by the FAC, furthermore, for delimiting the target area—a rail roadbed and a stream—could not be seen by the F-4 crews. What they did see, but did not question, was the ARVN compound on which the ordnance was delivered; it was a diamond—shape sandy area with straight sides perfectly visible from the air at night. Had this unnatural—looking feature of the terrain been questioned by the crews, the FAC would undoubtedly have realized what it was and called off the strike.

In his recommendations, the investigating officer said that FACs should use only prominent terrain features readily visible from the air at night, and that if aircrews have the slightest doubt or confusion, they should clarify them before expending. He also recommended that ground FACs no longer be used when fighters are working at night with flares as their only illumination.

An A-37 dropped napalm two kilometers from its intended target on 26 Jan 70 in the heavily populated region north of Saigon; fortunately, no one was hurt. It was 9 o'clock at night, and the FAC there was out of phosphorus marking rockets. A VNAF AC-47 dropped flares and, using an oral description from the FAC, the A-37 pilot released the BLU-27.

Seventh Air Force's conclusion was that the error lay with pilot for assuming he had the target in sight without really sufficient marking devices. The FAC also was reprimanded and grounded for two weeks.

Casualties among friendly troops also can occur when a ground commander prefers taking a calculated risk rather than run the greater danger of being overrun by the enemy.

On 3 Jun 69, for example, an AC-119--the second of three sent to stop an attack on a landing zone northeast of Saigon--was firing its miniguns according to directions furnished by the ground commander (callsign "Bad Baron"). Bad Baron first had the gunship turn off its spotlight illuminating friendly outpost positions in order to avoid revealing them to the enemy, then steadily asked the crew to bring its fire in closer to those positions.

Bad Baron's only means of determining where the rounds were impacting was by listening to the sound of where they were hitting the trees.

This sound had to come through heavy foliage and caused him to believe they were hitting farther away than they were. He therefore brought the fire closer and closer. Finally, six U.S. troops were wounded at a defensive position outside the unit's defensive perimeter.

The gunship's crew remained in ignorance of this fact until they heard a medical-evacuation helicopter being called in, and at this point they asked Bad Baron why. He explained that one of the last passes had "gotten a little too close and hurt some of my people." He didn't file

an Army short round report because his unit was "in close contact with the enemy and /he was/ pleased with the overall support from the gunship."

77/
The AF investigating officer absolved the AC-119 crew of all responsibility.

Four days later, almost exactly the same scene was re-enacted in Military Region I. The commander of a U.S. Marine reconnaissance patrol took the calculated risk of calling AC-47 minigun fire closer and closer to his team because it was in danger of being killed by an enemy force of unknown size. The minigun bullets which finally wounded three of his men probably recocheted off nearby trees.

The gunship crew was not at fault, for its fire was "placed accurate- $\frac{78}{}$ ly, in a careful manner, and as directed by the ground commander."

This commander did not file a short round report to Marine head-quarters. His team felt that, despite the three casualties, the AC-47 possibly saved them from being completely overrun. A factor in the incident was that the reconnaissance team did not carry entrenching equipment and could therefore not dig in to protect themselves from the minigun $\frac{79}{1}$ fire.

In another case, on 27 Apr 70, the FAC conducting an air strike did not ask the ground commander to accept responsibility for accidents although the commander wanted close-in support during an engagement in which he was unable to mark his position. Ten members of a Civilian Irregular Defense Group were killed and 16 wounded by general-purpose bombs dropped

by two Marine A-4s near Ha Thanh.

The USAF investigation concluded that the FAC used poor judgment in clearing a strike on a mark, the accuracy of which was described by the ground commander as, "Sounds OK, maybe a little close." The poor judgment, according to the report, was shared by the commander in "marking" his target like this. The FAC also erred in not asking the commander to accept responsibility once he knew the commander could not mark his $\frac{80}{\text{position}}$.

On 31 May 70 my platoon came in contact with an estimated enemy platoon in a bunker complex. We pulled back and called in artillery and air strikes. The enemy, expecting the heavy volume of artillery, moved in close to us knowing we would not bring the artillery on ourselves. We were still taking incoming rocket-propelled grenades when the napalm was called in close and injured a few of my men. We would have sustained more casualties from enemy fire if the napalm had not been called in so close. (Statement by 1st Lt S. R. Schultz, platoon leader)

This episode reveals another factor which bears on the subject of short rounds: the common VC tactic of clinging to the Allied force in order to <u>prevent</u> air strikes. It has caused more than one short round.

In this one, three U.S. infantrymen of the 101st Ariborne Division received napalm burns during an engagement in Military Region I. As the lieutenant said in his statement above, the enemy troops closed in on his platoon, believing that artillery and air support would in all likelihood not be brought in, but at the same time the enemy kept sending rocket-propelled grenades into the platoon. It was under these extreme

circumstances that the lieutenant, with the agreement of his company and battalion commander, requested that napalm be dropped inside the minimum safe distance for that ordnance, 115 meters.

Because of earlier activity, the platoon's supply of smoke grenades was depleted, but the battalion commander wanted to maintain the momentum of his unit's sweep and therefore asked the FAC whether he had a good enough fix on the target area and on the friendly positions to put in the napalm strike without any smoke to mark the friendlies' location. An Army investigating officer afterwards concluded that the decisions made were "reasonable and were dictated by the urgency of the tactical situation." He also was convinced that there was "an abundance of evidence available that the ground commanders, U.S. Air Force forward air controllers, and U.S. Marine Corps pilots performed their duties in a professional manner."

There was a category of short round incidents in Vietnam which were (1) regular, almost predictable, (2) not productive of a high number of casualties, and (3) perfectly avoidable. In these, the casualties were caused by personnel not taking cover during the air strikes, standing up instead in order to watch the show.

An incident that occurred 15 kilometers west of Quang Ngai on 1 Sep 69 and injured an ARVN battalion commander illustrates this category.

During this air strike the South Vietnamese troops were 450 to 650 meters to the northwest of the target, which was bunkers, trenches, and

buildings occupied by the VC. With the ARVN battalion commander were his U.S. Marine advisor and a radio man, who took cover as the Marine F-4s made their pass. The commander did not, however, and he was hit in the forehead by a piece of brick from a masonry building which was bombed. It was a freak accident, for he was 450 meters from the building, normally far enough to avoid bomb fragments, but the height of the building increased the radius of vulnerability—and, of course, he was standing up watching the show. His division commander did not consider \$82/\$ the accident as a short round.

On 7 Jun 70, at night, three members of an element of the 101st

Airborne Division were injured during a strafing pass by an F-4 when they were standing up watching the pass 800 meters down range from the target.

In this case, there was another factor which contributed: the ground 83/

commander had not informed the FAC of all the friendly positions.

An MK-81 bomb killed an Americal soldier on 21 Aug 69 who was outside the lethal radius of that bomb and in dense, almost triple-canopy jungle. He had, moreover, been ordered to get down. He did not, and the bomb hit on a high knoll, which as in the earlier case favored a longer radius of fragmentation.

On 21 May 69* an ARVN soldier who disobeyed instructions to take

^{*} Information made available after preparation of previous CHECO report on short rounds.

cover was hurt by an MK-117 bomb fragment which had gone through 800 meters of thick forest. All concerned acknowledged it was a freak accident and agreed to forget about it rather than present it as an official short round.

Disobeying a take-cover order caused injury to two other ARVN soldiers on 6 Aug 70. They were standing up watching the air show, and their commanders followed the incident up, not by filing a short round report, but by disciplining the men.

Another category of short round--just as frequent but more difficult to eliminate--generally caused greater casualties. It resulted from the differences in languages--English, Vietnamese, Cambodian, mountain dialects, and others.

During the night of 26 Oct 69, for instance, one Civilian Irregular Defense Group militiaman was killed and two wounded by an AC-47 gunship. The VC had crawled to their camp and carefully turned all the claymore mines on the east perimeter around so that they faced the friendlies. The "Spooky" gunship fired 17,500 rounds, dropped 22 flares, and two smoke markers around the perimeter, hitting the three mountain irregulars. (There was no report available on the number of VC hit.)

It took the gunship crew a full hour after its arrival over the camp before firing, to determine from the mountain tribesmen, through a Vietnamese interpreter, what the situation was and where the friendly and enemy positions were. The crew seemingly got it wrong anyway, and

there also remained differences of opinion as to where VC troops were exactly. Some of the difficulty in communicating can be inferred from this excerpt from the AC-47's tape of his radio transmissions:

VC run away. PN /ground controller/ request Spooky to drop flare and continue to shoot in same place. . . . PN says Spooky fires exactly on position, but too far to the south.

Other factors contributing to the incident were the fact that the commander himself possibly did not know the location of all his own elements, and the fact that he continually called for closer and closer fire.

The investigating officer said that the ground commander was not at fault for bringing the gunship's fire in closer because the tactical situation justified it. Nor was there anything in the gunship crew's conduct of the strike that could be faulted.

He did, however, recommend for similar situations in the future that "when an interpreter is involved, all conversation between air and ground be short and concise, giving only the essential information," and $\frac{89}{100}$

procedures be checked with Vietnamese AC-47 crew now flying and compare how they handle similar situations. Perhaps more standard terminology could be used when dealing with CIDG operations. These interpreters could then be given more training before being allowed to fly with Spooky or Shadow aircraft.

On 2 Aug 70 a USAF F-100 dropped two canisters of napalm on a friendly Cambodian position, killing two and wounding 13. It is typical of the racial animosity existing between Vietnamese and Cambodian that the Cambodians--almost reflexively--assumed the aircraft to be Vietnamese and that first reports from Cambodian headquarters put the casualties at 300.

The primary cause of the mishap, according to the officer who had to carry out his investigation under difficult conditions, was the failure of the Cambodian ground commander--possibly through ignorance of Allied procedures--to have all his elements mark their positions and brief the FAC on their positions before the strike began. Some idea of the difficulties of communicating in that environment can be gathered from the fact that the Cambodian troops marked positions by laying panels of cloth on the ground according to prearranged codes.

A contributing cause, however, was the communication difficulties in the cockpit of the F-100 itself, where the "FAC team" consisted of a USAF FAC and a Cambodian "observer." When the observer, for instance, was notified of additional friendly positions at the last minute, he passed them on the U.S. FAC but neglected to use the interphone "call" position. This would have ended the attack instantly. The U.S. FAC, previously, although he had marked a position for strike by means of a smoke rocket, neglected or found it too difficult to ask his observer whether it was in the right spot. A clarification here too would have prevented the short round.

CHAPTER V

RELATED AND MISCELLANEOUS INCIDENTS

An ARVN soldier, while sleeping in his thatched hut at midday of 22 Apr 69, was killed by a pallet fully loaded with ammunition which had been dropped from a USAF C-123 aircraft.* The C-123 was one of two dropping five pallets each into a drop zone located in the southernmost tip of South Vietnam, An Xuyen Province. The zone was several hundred meters west of a Regional Forces compound to which the victim belonged. Although they had not claimed any victims, two pallets had previously fallen within the compound in 1969.

As the aircraft were enroute to the drop zone, two U.S. Army enlisted men there--part of a ground element, call sign "Even Rates Mike-Mobile"--asked the aircraft whether "an alternate target was available as the ammunition from the previous drop still had not been recovered from the drop zone," for reasons that will be understood later. None was, so a FAC was scrambled by Military Region IV's Direct Air Support Center to cover the drop at Dam Doi, as originally scheduled. The FAC gave the C-123s a run-in heading of 080 degrees with instructions to drop the pallets west of a smoke grenade that would be ignited. When it was, however, the nearness of a group of Vietnamese caused Even Rates Mike-Mobile to ask, through the FAC, that the first C-123 drop its cargo east

^{*} The file on this incident was not available in time for the previous CHECO report on short rounds which had the cut-off date of May 1969.

91/

of the smoke--just as it was turning into his final run-in heading.

The smoke was an estimated 150 meters west of the compound. All five pallets were dropped. The FAC reported that the first bundle hit 200 feet long at 11 o'clock. The second bundle was about 30 meters short of the compound. A third bundle was between a double row of security perimeter fence. The fourth was about 10 meters inside the compound in a puddle of casual water. The last pallet hit the house about 150 meters farther east near the middle of the compound.

The later USAF investigation revealed many surprising aspects of the situation at Dam Doi. The economy of the region is such that the materials used for a drop--the pilot chute, main chute, pallet, and packing materials--have relatively great value and are immediately scavenged when one of these drops takes place. This accounts for the gathering of people near the drop zone whenever a FAC aircraft or a C-123 was sighted. A few months earlier, an armed battle was fought on the scene in which one person was wounded by a knife and two by gunfire. The Vietnamese military personnel actually lowered a 155mm artillery piece to aim at their rivals at the drop zone, but because it could not be sufficiently depressed to fire horizontally, more injuries were averted. U.S. personnel have counted up to 200 people at one time on the drop zone. The ammunition was often left at the drop zone for long periods because of its lack of immediate value or possible use in the lives of the Vietnamese there. When the pallet came through the roof and killed the ARVN soldier, he was sleeping in a hammock made from the cargo-drop materials described above. By the time U.S. Army personnel got to his hut, the

packing materials of the lethal pallet had already been taken.

The USAF report also said

One of the strangest facts of this problem is the lack of knowledge of all concerned as to how these cargo drops materialize. There appears to be no knowledge available, from subsector to Corps level, as to who requests these drops or how often they occur. The District Senior Advisor, Capt. Hahn, has repeatedly requested that the S-4 at An Xuyen Sector terminate the aerial resupply. The Sector S-4 tried for about a week to determine who orders these drops. He was unable to do so. . . . This investigator called Division's G-4's office who referred me to IV Corps G-4. A call to IV Corps produced a similar lack of knowledge. . . . IV DASC Mission Flimsy #7, dated 8 Nov 68 para 2b says the Sector S-4 initiates requests. However, all concerned at Sector level disclaim this responsibility. Later a IV Corps G-4 officer called to state that a Vietnamese at JGS level in Saigon orders resupply and American airlift plans the method and times. . . . There was additional cargo drops set for this location on 24 and 25 April which, based on my discussion and observation at Dam Doi on 23 April, I recommended be canceled. On 23 April while investigating this incident a FAC flew over the drop zone. After establishing contact with him, we held a "simulated cargo drop." He circled the drop zone several times and dropped two smoke grenades. On the ground we ignited two more. By this time I observed 25 to 30 people, some with knives, assembling for the expected drop. The FAC reported six more crossing a nearby canal by sampan. . . . The District Advisor reported that cargo drops had taken place on 15, 16, 17, 18, 19, 20, and 22 April. I believe this gross oversupply is a factor in this incident.

The remedies for the situation at Dam Doi went far beyond the competance and jurisdiction of 7AF, and its investigating officer could merely recommend that the matter be brought to the attention of the proper authorities. For those aspects which did solely concern 7AF, the investigator was able to be specific regarding the causes of the incident

and his recommendations. The principal cause, he noted, was "the dropping of these pallets without the required drop zone size of 200 by 400 yards."

Other factors that contributed were the request for a drop zone change just before the cargo aircraft's turning into final approach and "the failure of the ground personnel to have a firm policy as to where the drop zone should be located and under what conditions the drop should be canceled."

The investigator recommended that locations due to receive cargo be notified as early as practicable "rather than employing the present method of receiving initial notification via the FAC." As for Dam Doi itself, he recommended that it be resupplied by river, based on considerations of cost effectiveness, safety, ease of handling, and security.

Two F-100s, on a preplanned mission to strike VC troops in bunkers 41 miles southeast of Binh Thuy in the Delta, dropped two 750-lb. bombs 100 kilometers north of the target, destroying a house and a sampan, damaging two other houses, and injuring four Vietnamese civilians. Some readers will immediately recognize the source of this gross bombing error: a mistake of one letter in transcribing the Universal Transverse Mercator (UTM) coordinates. The incident occurred on the night of 27 Jun 69, and the fighter bombers were using the Combat Skyspot, technique derived from the radar bomb-scoring methods and equipment of the Strategic Air 95/Command and later found to be valuable for actual bombing.

The sole cause of this incident was "human failure" on the part of the airman at the radar site who wrote the coordinates down wrong as he encoded them for verification at the Direct Air Support Center with which the site was working for the strike. Most of the other targets that he had been working on that night began with XS. The coordinates for the target near Binh Thuy began with XR. Without thinking, the airman encoded XS again. Because of the disquieting potential for more serious short rounds, however, the Combat Skyspot techniques were thoroughly revised—at the sites and at the DASCs. A doublecheck system was instituted that required two people at each point to individually copy and jointly concur on the target coordinates, finally reading them back to each other for reverification. As a crosscheck to this, a double-grid system between the DASC and Skyspot sites was also directed. The facilities which had secure phones were directed to use them for the transmission of these coordinates.

A 2000-foot "jump" in the track range computer of a Combat Skyspot site caused a B-52 short round on 26 Mar 70 which destroyed two houses and injured 17 Vietnamese in the Seven Mountain area of Chau Doc Province. The raid had been set up in order to disrupt a build-up of Communist troops, but all the bombs fell outside the target box. Ironically, a back-up site (normally used for Combat Skyspot bombing) functioned properly, and if the advisory from that site had been consulted, the error could have been detected and the raid stopped. Because he did not make

that comparison, as the AF manual prescribes, the Senior Mission Director was cited in the investigation report for having made an "error in judgment."

Although a generous amount of good luck prevented any casualties, fighter-bombers dropped their ordnance in the wrong place within several hundred yards of two U.S. Marine units on 16 Sep 69, in the extreme north of South Vietnam. Again, someone had copied the wrong coordinates—this time in the tactical air-control party attached to the 1st ARVN Division.

The FAC controlling the fighters had noted that the coordinates were north of his usual area for preplanned strikes in support of ARVN troops, and on his way he therefore asked the party to confirm those coordinates once again, which they did. He then contacted the nearby Marine DASC and was told that a Marine unit had indeed made contact with the enemy earlier and needed support by tactical aircraft.

The Marine unit at the wrong coordinates gave an adjusted location for the enemy troops, following which the FAC put in the strike. When it was over, a Marine reconnaissance team made its presence known about 300 to 500 meters from the area hit.

Because of this incident the air-control party revised its procedures for preplanned air strikes, making it standard--among other changes--for the FAC to be given the name of the ground commander or at least the designation of the unit to be supported, before an air strike. Cross-checks were also instituted to enable FACs and ALOs to confirm the



correctness of map coordinates given.

The USAF herbicide program in Southeast Asia, alleged to have had deleterious effects on wild and domestic animal life, claimed its first human victims on 9 Aug 69. One Vietnamese civilian was killed and seven wounded by the fragments from rockets fired from two U.S. Army AH-IG Cobra helicopter gunships—part of the standard aircraft "package" used for these missions in the Delta, the others being fighters, FAC aircraft, and the UC-123 spray aircraft. Strikes were usually made before the mission by the fighters, and during the mission both the fighters and the helicopters laid down suppressive fire within the target box, under certain conditions. It was a misunderstanding of these conditions which led to the present incident.

Its more basic cause, however, was a 10-degree navigational error by the lead navigator in the UC-123 which was picked up by the other aircraft. Although the gunships did not fire until near the end of the spray run, when they saw two sampans, by that time the aircraft were at their farthest from the target box (a rectangle 800 meters wide and 15 kilometers long). Both FACs, ironically, had the strong impression that all the aircraft were straying off the intended track. But since they understood navigation to be the responsibility of the lead UC-123 navigator, since they were not absolutely certain of being off course, and since they did not know that the Cobra gunships had the right to fire at anyone they saw on the ground, they did not speak up until it was too late. The FACs believed that the policy governing suppressive fire by

the gunships was "fire for fire" clearance only. In fact, among all parties concerned, including IV DASC, there was confusion on this point. The incident served to clarify policy regarding herbicide missions and bring it to the attention of all those who might take part in them.

The inadvertent release of ordnance was not a very great factor in creating short rounds, when seen against the backdrop of the large number of sorties flown in South Vietnam--76,000 attack sorties (USAF, USN, USMC) in 1970.

On 11 April 70 an F-100 flying a night mission 50kms southwest of Saigon dropped napalm on six Vietnamese Marines, burning but not killing $\frac{100}{100}$ them. It was inadvertent—the pilot had meant to release flares. In Tay Ninh Province on the afternoon of 15 Oct 69 an F-4 inadvertently dropped a can of napalm 1600 meters short of its target. It fell on a village, burning a boy and five ARVN soldiers. However, it was never established whether the release was due to a malfunction in the equipment or to a mistake on the part of the pilot.

During the period covered by this report, one incident was due to the FAC's unfamiliarity with the designations of ordnance. A USAF FAC who had been working a large number of aircraft in Military Region I on 30 May 70 directed a strike of three Navy A-7s carrying MK-36 mines into an area not authorized for the seeding of land mines. The aircraft had originally been loaded with the mines so that the Ho Chi Minh Trail ford at Xe Pon could be interdicted. The investigation revealed that the FAC



thought that MK-36s were a type of high-drag iron bomb. He was returned to training. His unit was told to reexamine its check-out program on weapons characteristics. And the area was sealed off until an ordnance disposal team disarmed the mines.

In the Delta on 23 Mar 70 two civilians presented themselves at the Tri Ton District hospital for treatment, claiming that they had been wounded by land mines that day. Although it was true that a mine-seeding operation had been conducted by the USAF on the same day, IV DASC concluded that those mines probably could not have caused the injuries: the Vietnamese farmers would not have had the time to get from the area seeded to the hospital by the time they reported. The issue was closed. However, during the course of the investigation, it was discovered that on the following day, at a short distance from where the CBU-42s were supposed to have been seeded, five cows were blown up. While investigating, the owner of the cows was killed and a woman injured.

FOOTNOTES

CHAPTER I

- 1. (C) MSG, COMUSMACV to 7AF and Others, Subj: Rules of Engagement Air Operations, 170151Z Sep 70.
- 2. (C) MSG, COMUSMACV to VMAC, Subj: Friendly Casualties Resulting from Supporting Fires, 151205Z Jan 71; (S) CHECO Reports "Short Rounds" 1965 to 1969, Hq PACAF.
- 3. (U) 7AFR 55-39, Paragraph 1.
- 4. (U) Interview, Col W. L. Skliar, Chief, 7AF (DOCT), w/Mr. James T. Bear, 10 Dec 69.
- 5. (C) MSGs, COMUSMACV to VMAC, Subj: Friendly Casualties Resulting from Supporting Fires-3d Quarter 1969 through 4th Quarter 1970.
- 6. (C) Ibid; (S) CHECO Report "Short Rounds" June 1967 June 1968, Hq PACAF 23 Aug 68.
- 7. (FOUO) Rpt, Pacification Attitude Analysis System Report, Dec 70, MAC-CORDS Pacification Study Group.
- 8. (C) MSG, 7AF (TACC) to AIG 7946, no subj: 4 July 69.

CHAPTER II

- 9. (C) MSG, COMUSMACV to CG I FForce-V, Subj: Attack Vic Dak Dam Post, Cambodia, 210015Z Nov 69.
- "Background Information on Enemy Situation in the Bu Prang -Duc Lap Area," undated, prepared by AC of S, G-2, Hq MACV, undated.
- 11. (C) Ibid.
- 12. (C) <u>Ibid</u>.
- 13. (C) Ibid.
- 14. (S) MSG, 7AF to DASCs, Subj: Rules of Engagement-Cambodia, 150105Z Nov 69.

- 15. (S) Ibid.
- 16. (C) Duty Officer's Log, 23rd TOC, IFFV, 16 Nov 69.
- 17. (C) Ibid.
- 18. (C) MSG, OIC, Artillery Operations, FMS, Ban Me Thuot, to CO, I FFV Artillery, Subj: Report of Interview.
- 19. (S) "Summary of Events," 2nd TAC 'E' 16 November 1969, DASC Alpha.
- 20. (S) "Summary of Events," 17 November 1969.
- 21. (C) MSG, COMUSMACV to CG I FForce-V, Subj: Attack Vic Dak Dam Post, Cambodia, 210015Z Nov 69.
- 22. (C) MSG, OIC, Artillery Operations, FMS, Ban Me Thuot, to CO, I FFV Artillery, Subj: Report of Interview; (S) "Summary of Events," 2nd TAC 'E' 16 November 1969, DASC Alpha.
- 23. (S) "Summary of Events," 2nd TAC 'E' 16 November 1969, DASC Alpha.
- 24. (S) Map and Legend, No. FFS 2141-69, undated, on CHECO Micro-film Cartridge No. 380, approximate Frame No. 88.
- 25. (S/NF) MSG, FVPSA, Quang Due to AOCG IFFV, No Subj: 260345Z Nov 69.
- 26. (C) Study, "Artillery Analysis," prepared by Lt Col P. W. Wilson, Jr., S3, I FFV.
- 27. (U) News Dispatch, Associated Press, No. AP 18, 6 May 1970.
- 28. (S) Report of Inquiry Concerning the Attack of Snoul, Cambodia, on 5 May 70, Hq 7AF-TACO.
- 29. (U) Stars and Stripes, 5 May 70.
- 30. (S) Report of Inquiry Concerning the Attack of Snoul, Cambodia, on 5 May 70, Hq 7AF-TACO.
- 31. (S) <u>Ibid</u>.
- 32. (S) Report of Inquiry Concerning the Attack of Snoul, Cambodia, on 5 May 70, Hq 7AF-TACO.
- 33. (S) FAC Mission Report, 1st Lt S. B. Baker, 5 May 70.

- 34. (S) FAC Mission Report, Capt J. A. MaClennan, 5 May 70.
- 35. (S) Signed Statements, undated by 1st Lt R. L. Spangal, Capt W. E. Barrineau Jr., Capt R. G. Lawrence, 1st Lt W. S. Hinton, Jr., Capt D. E. Bellingham, 1st Lt P. D. Walker, Lt Col W. N. Tomlin, Capt J. S. Quick, Capt R. E. Vasser; all being attachments to Report of Inquiry concerning the Attack of Snoul, Cambodia, 5 May 70, Hq 7AF (TACO).

CHAPTER III

- 36. (C) Rpt, ALO Task Force South to 7AF (TACWFP), Subj: SR Preliminary Investigation, 18 Apr 70.
- 37. (C) Statement, 17 Apr 70, by Maj P. W. Beale, Royal Australian Army.
- 38. (C) Statements, 7 Apr 70, by Capt P. A. Schlie, Lt Col W. E. Davis, and 1st Lt J. D. Finley, USAF (attachments to report cited as footnote No. 1).
- 39. (C) Rpt ALO Task Force South to 7AF (TACWFP), Subj: SR Preliminary Investigation, 18 Apr 70.
- 40. (C) Ibid.
- 41. (C) Report of Investigation Hq 198th Brigade, Lt Col J. E. Hayden Jr., to Cmdg Gen. Americal Division, 29 Jan 70.
- 42. (C) Statement, 1st Lt R. S. Leslie, 11 Feb 70.
- 43. (C) Report of Investigation, Hq 198th Brigade, Lt Col J. E. Hayden Jr., to Cmdg Gen, Americal Division, 29 Jan 70.
- 44. (C) <u>Ibid</u>.
- 45. (C) <u>Ibid</u>.
- 46. (C) Statement by Maj J. B. Kerr Jr., USAF, SNAP FAC 03.
- 47. (C) <u>Ibid</u>.
- 48. (C) Statement by Capt S. R. Berkheiser, USMC, District Senior Advisor, Can Gio.
- 49. (C) Statement by Maj J. B. Kerr Jr., USAF, SNAP FAC 03.
- 50. (C) Report of Investigation, Hq 198th Brigade, Lt Col J. E. Hayden Jr., to Cmdg Gen. Americal Division, 29 Jan 70.

- 51. (C) Statement by Capt S. R. Berkheiser, USMC, District Senior Advisor, Can Gio.
- 52. (C) Rpt III DASC to 7AF (TACWP), Subj: Investigation of Alleged Short Round, 17 Aug 69.
- 53. (U) Statement by Capt Trau Quaug Nghiem, District Chief of Duc Hue District, undated.
- 54. (C) Rpt, DASC Alpha to 7AF-TACWFP, Subj: Short Round Preliminary Investigation.
- 55. (C) Rpt, I-DASC to 7AF (TACO), Subj: Short Round Investigation, 19 Aug 70.
- 56. (C) Statement by Lt Col J. J. Nelson, ALO 1st ARVN Div., Subj: Short Round Incident.
- 57. (C) Statement by Maj. B. R. Lyle, USAF, undated.
- 58. (C) Rpt, I-DASC to 7AF (TACO), Subj: Short Round Investigation, 19 Aug 70; (C) Statement, Maj J. F. Knight, USAF, undated, Attachment #6 to preceding report.
- 59. (C) Rpt, I-DASC to 7AF (TACO), Subj: Short Round Investigation, 19 Aug 70.
- 60. (C) Ibid.
- 61. (C) From ALO, 4th Inf Div to 7AF (TACWFP), Subj: Short Round Preliminary Investigation, 1 Apr 70.
- 62. (C) Rpt, from III DASC to 7AF (TACWFP), Subj: Alleged Short Round Preliminary Report, 17 Sep 70.
- 63. (C) Ibid; (C) Statement by 1st Lt N. D. Jones, USAF, undated, Attachment to above.
- 64. (C) <u>Ibid</u>.
- 65. (C) Statement by 1st Lt W. E. Harwell, USAF, undated, attachment to No. 27 above.
- 66. (C) Rpt, from III DASC to 7AF (TACWFP), Subj: Alleged Short Round Preliminary Report, 17 Sep 70.
- 67. (C) <u>Ibid</u>; (C) Statement by 1st Lt N. D. Jones, USAF, undated attachment to above.

- 68. (C) Statement by 1st Lt R. W. Shoulars, USAF, undated, attachment to No. 27.
- 69. (C) <u>Ibid</u>; (C) Statement by 1st Lt N. D. Jones, USAF, undated, attachment to above.
- 70. (C) Rpt, from III DASC to 7AF (TACWFP), Subj: Alleged Short Round Preliminary Report 17 Sep 70.
- 71. (C) Rpt, from II DASC to Hq 7AF (TACWFP), Subj: Short Round Preliminary Investigation, 30 June 70.
- 72. (C) Rpt, III DASC to 7AF-TACWFP, Subj: Alleged Short Round Preliminary Report, 3 Dec 69 (attachment therefore).
- 73. (C) Ibid. .

CHAPTER IV

- 74. (C) Rpt, Short Round Preliminary Investigation, from I DASC to 7AF (TACC), 12 May 70.
- 75. (C) Ltr, from DASC to 7AF (TACWFP), Subj: Short Round Preliminary Investigation, undated.
- 76. (U) Memo for the Record, 7AF (DOCT), undated, located in DOCT File "Ops 4."
- 77. (C) Ltr, III DASC to 7AF (TACWFP), Subj: Short Round Preliminary Report, 8 Jun 69.
- 78. (S) Memo, 7AF-DOCO to 7AF-DO, Subj: Possible Short Round Incident 7 Jun 1969 Unilateral Investigation, dated 25 Jun 69.
- 79. (S) <u>Ibid</u>.
- 80. (C) Rpt, 7AF (DOCO) to 7AF (DO), Subj: Short Round Investigation 27 April 1970, dated 5 May 70.
- 81. (C) Rpt, "Final Report of Investigation, Friendly Fire Incident. 1/501st Int., 6 Jun 70.
- 82. (C) Ltr, 2nd ARVN Division ALO to I Corps ARVN ALO, Subj: Mishap Causing Friendly Injury, 3 Sep 69.
- 83. (C) Memo, 7AF (DOCO) to 7AF (VC), Subj: Possible Short Round 8 Jun 70.

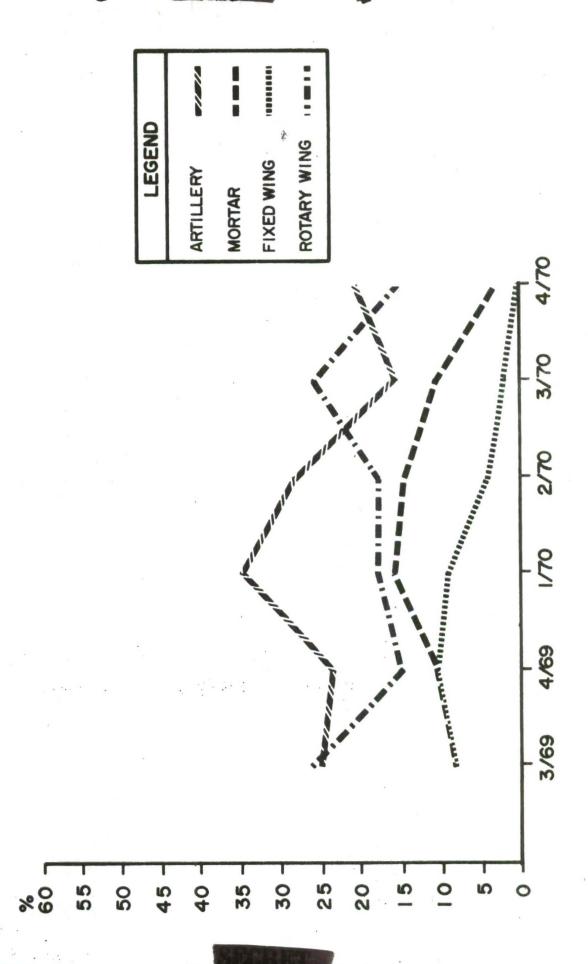
- 84. (C) Ltr, from DASC to 7AF (TACWFP), Subj: Short Round Preliminary Investigation, 25 Aug 69.
- 85. (C) Memo, 7AF (DOCO) to 7AF (C), Subj: Possible Short Round Incident, 31 May 69.
- 86. (C) Memo, 7AF (DOCT) to 7AF (C), Subj: Short Round, 7 Aug 70.
- 87. (C) Memo for the Record 7AF (DOCT), undated.
- 88. (C) Attachment to "Short Round Preliminary Investigation, DASC Alpha," 30 Oct 69.
- 89. (C) Ltr, DASC Alpha to 7AF (TACWFP), Subj: Short Round Preliminary Investigation, 30 Oct 69.
- 90. (C) Ltr, III DASC to 7AF (TACO), Subj: Alleged Ordnance Impacting Outside Target Area, 5 Aug 70.

CHAPTER V

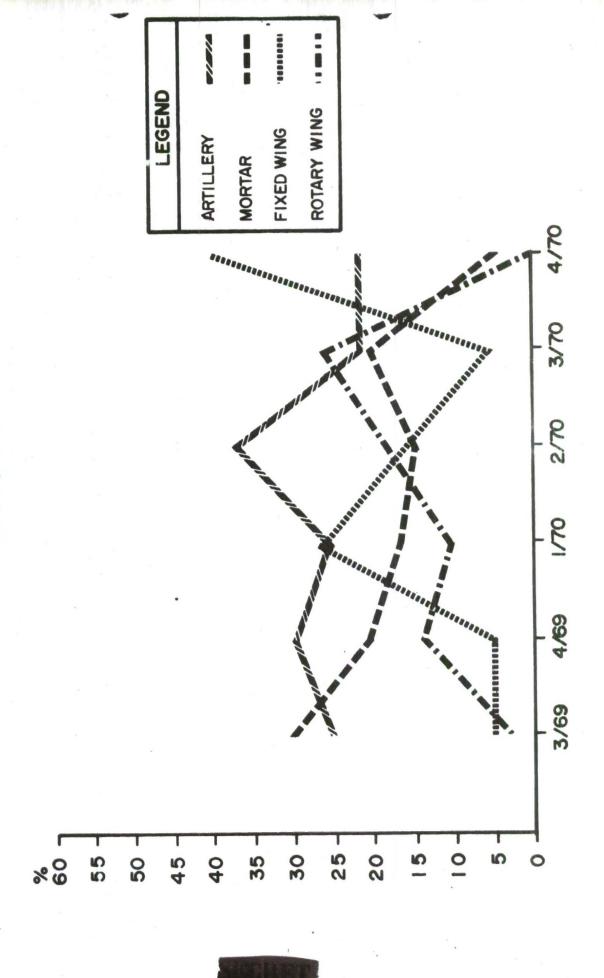
- 91. (C) Rpt, "Investigation of a Cargo Drop Incident An Xuyen by Lt Col P. R. Myers, USAF, 21st ARVN Division ALO, undated, with attachments.
- 92. (C) <u>Ibid</u>.
- 93. (C) Ibid.
- 94. (C) Ibid.
- 95. (S) Memo, 7AF (TACO) to 7AF (DO), Subj: Short Round Investigation, 28 Jun 69, dated 12 Aug 69.
- 96. (S) Memo, 7AF (TACO) to 7AF (C), Subj: Combat Skyspot Targeting Procedures, 17 Aug 69.
- 97. (C) Ltr, 7AF (DO) to Det 15, 1st Combat Evaluation Group (SAC), Subj: Short Round Incident 26 Mar 70.
- 98. (U) Ltr, 1st ARVN Division ALO to I Corps ARVN ALO, Subj: Preplan Airstrike Incident on 16 Sep 69.
- 99. (S) Rpt, "Short Round Preliminary Investigation." 21st Div ALO to 7AF (TACWFP), 13 Aug 69.

- 100. (C) Memo, 7AF (TACO) to 7AF (DOCO), Subj: Suspected Short Round, 11 Apr 70.
- 101. (C) Ltr, from III DASC to 7AF (TACWFP), Subj: Alleged Short Round Preliminary Report, 18 Oct 69.
- 102. (C) MSG, IV DASC to 7AF (TACO), Subj: Suspected Short Round, 260650Z Mar 70.

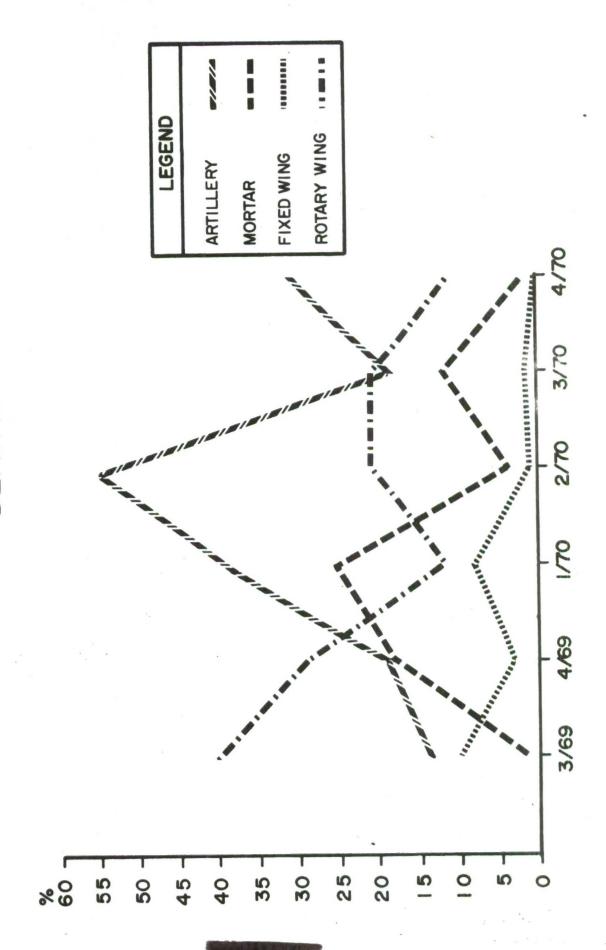
ANALYSIS OF SHORT ROUNDS INCIDENTS



ANALYSIS OF SHORT ROUNDS WOUNDED



ANALYSIS OF SHORT ROUNDS DEATHS



GLOSSARY

ALO Air Liaison Officer

ARVN Army of Republic of Vietnam

CIDG Civilian Irregular Defense Groups

DASC Direct Air Support Center

FAC Forward Air Controller FM Frequency Modulation

IR Infrared

MACV Military Assistance Command, Vietnam

NVA North Vietnamese Army

RTB Return to Base

TACC Tactical Air Control Center

UHF Ultra High Frequency
USAF United States Air Force

UTM Universal Transverse Mercator

VC Viet Cong

VNAF Vietnam Air Force